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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
TORRES, JOSEPH D	

ART UNIT	PAPER NUMBER
2133	

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/974,799	TOMARU ET AL.	
	Examiner	Art Unit	
	Joseph D. Torres	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 April 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *30-51* is/are pending in the application.

4a) Of the above claim(s) *48 and 49* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *30-47,50 and 51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 30-47, 50 and 51 in the reply filed on 24 May 2004 is acknowledged.

Claims 48 and 49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 24 May 2004.

This application contains claims 48 and 49 drawn to an invention nonelected without traverse in the reply filed on 24 May 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Comment on Previous Office Action

2. All claims in the current amendment filed 06 April 2004, hence the previous rejections and objections to cancelled claims 1-29 are mute.

Specification

3. In view of the current amendment filed 06 April 2004, the objection to the abstract is withdrawn.

The disclosure is objected to because of the following informalities: Claim 34 is a single means claim. MPEP § 2164.08(a) states, "a single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.)". Hence the specification is objected to since it does not cover every conceivable means for achieving the stated purpose of claim 34. Appropriate correction is required.

Response to Arguments

4. Applicant's arguments with respect to newly added claims 30-47, 50 and 51 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 34-47 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention. MPEP § 2164.08(a) states, "a single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983) (A single means claim which covered every conceivable means for achieving the stated purpose was held nonenabling for the scope of the claim because the specification disclosed at most only those means known to the inventor.)". Claims 34 and 41 are single means claims. Claims 35-40 depend from claim 34, hence inherit the deficiencies in claim 34. Claims 42-47 depend from claim 40, hence inherit the deficiencies in claim 40.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 30-47, 50 and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by Rathonyi; Bela Stefan Kazmir et al. (US 6359877 B1, hereafter referred to as Rathonyi).

35 U.S.C. 102(e) rejection of claim 30.

Rathonyi teaches a communications method, which uses a data packet composed of a plurality of error correction blocks of block-type error correction codes (col. 7, lines 22-23 in Rathonyi teaches that CRC error correction codes are used for detecting errors in transmitted packet blocks; Note: col. 9, lines 44-51 in Rathonyi teach that a previous packet block from a previous packet 3 can be transmitted with a new packet block corresponding to a packet 9, hence the packet transmission frame used to transmit the two packets is a multiple block packet transmission frame consisting of two packets; Note also, that a packet transmission frame is a unit of transmission corresponding to one or more packet blocks contained in the packet transmission frame, hence the new packet transmission frame is formed of two blocks of previous packets), comprising the steps of: transmitting an error correction state of each error correction block from, a receiving end to a transmitting end (Figure 3C in Rathonyi teaches that a NAK, i.e., an error correction state of each error correction packet block, is transmitted from a receiving end to a transmitting end whenever an error is detected); and adding a block, a retransmission of which has been requested, to a block constituting a data packet to be transmitted next or subsequently from the transmitting end, thereby increasing a number of blocks in the data packet for transmission (col. 9, lines 44-51 and Figure 3C in Rathonyi teaches adding a packet block 3, a retransmission of which has been requested, to a packet block 9 constituting a data packet to be transmitted next or subsequently from the transmitting end, thereby increasing a number of blocks to two in the data packet transmission frame for transmission).

35 U.S.C. 102(e) rejection of claim 31.

Rathonyi teaches the data packet contains a retransmission-block field where the block, a retransmission of which has been requested, is added, the field being not used in an ordinary state where there is no retransmission request (the sixth packet transmission frame in Figure 3C of Rathonyi contains a retransmission-block field where the packet block 3, a retransmission of which has been requested, is added, and if there is no retransmission request no field is created and an ordinary transmission takes place); and if a retransmission of more blocks than the retransmission-block field has been requested, some blocks to be transmitted in the data packet to which are added the blocks, a retransmission of which has been requested, are added to a subsequent data packet for transmission using the retransmission-block fields (in Figure 3C of Rathonyi requests for packet blocks 3, 8, 6 and 11 are made and the packet blocks 3, 8, 6 and 11 are added to subsequent blocks as room is made or becomes available for them).

35 U.S.C. 102(e) rejection of claim 32.

The NAKs in Figure 3C contain identification numbers of received blocks.

35 U.S.C. 102(e) rejection of claim 33.

The NAKs in Figure 3C contain identification numbers of received blocks and includes the number of identification numbers for which the error correction concluded determining that the blocks were decoded with uncorrectable errors (Note: the third

NAK contains identification numbers 6 and 11 of received blocks and includes the two identification numbers for which the error correction concluded determining that the blocks were decoded with uncorrectable errors).

35 U.S.C. 102(e) rejection of claims 34 and 41.

Rathonyi teaches a communications apparatus, which uses a data packet composed of a plurality of error correction blocks of block-type error correction codes (col. 7, lines 22-23 and Figures 1 & 2A in Rathonyi teaches that CRC error correction codes are used for detecting errors in transmitted packet blocks; Note: col. 9, lines 44-51 in Rathonyi teach that a previous packet block from a previous packet 3 can be transmitted with a new packet block corresponding to a packet 9, hence the packet transmission frame used to transmit the two packets is a multiple block packet transmission frame consisting of two packets; Note also, that a packet transmission frame is a unit of transmission corresponding to one or more packet blocks contained in the packet transmission frame, hence the new packet transmission frame is formed of two blocks of previous packets), comprising the steps of: transmitting an error correction state of each error correction block from, a receiving end to a transmitting end (Figure 3C in Rathonyi teaches that a NAK, i.e., an error correction state of each error correction packet block, is transmitted from a receiving end to a transmitting end whenever an error is detected); and adding a block, a retransmission of which has been requested, to a block constituting a data packet to be transmitted next or subsequently from the transmitting end, thereby increasing a number of blocks in the data packet for

transmission (col. 9, lines 44-51 and Figure 3C in Rathonyi teaches adding a packet block 3, a retransmission of which has been requested, to a packet block 9 constituting a data packet to be transmitted next or subsequently from the transmitting end, thereby increasing a number of blocks to two in the data packet transmission frame for transmission).

35 U.S.C. 102(e) rejection of claims 35 and 42.

Rathonyi teaches the data packet contains a retransmission-block field where the block, a retransmission of which has been requested, is added, the field being not used in an ordinary state where there is no retransmission request (the sixth packet transmission frame in Figure 3C of Rathonyi contains a retransmission-block field where the packet block 3, a retransmission of which has been requested, is added, and if there is no retransmission request no field is created and an ordinary transmission takes place); and if a retransmission of more blocks than the retransmission-block field has been requested, some blocks to be transmitted in the data packet to which are added the blocks, a retransmission of which has been requested, are added to a subsequent data packet for transmission using the retransmission-block fields (in Figure 3C of Rathonyi requests for packet blocks 3, 8, 6 and 11 are made and the packet blocks 3, 8, 6 and 11 are added to subsequent blocks as room is made or becomes available for them).

35 U.S.C. 102(e) rejection of claims 36, 38, 43 and 45.

The sixth packet transmission frame in Figure 3C of Rathonyi teaches that the new and retransmitted packet blocks are added in consecutive order so that the retransmitted packet blocks are either at the head or at the tail of the sixth packet transmission frame.

35 U.S.C. 102(e) rejection of claims 37 and 44.

The last packet transmission frame in Figure 3C of Rathonyi teaches that packet block 11 is added between the head and the tail of last packet transmission frame.

35 U.S.C. 102(e) rejection of claim 39, 40, 46 and 47.

Figure 3C of Rathonyi teaches that packet blocks can either have a fixed number of blocks when no retransmission is required or a variable number of blocks, if retransmission is required.

35 U.S.C. 102(e) rejection of claim 50.

Rathonyi teaches a communications system, including: a communications apparatus which receives a data packet composed of a plurality of blocks (the sixth packet transmission frame in Figure 3C of Rathonyi is a data packet transmission frame composed of a plurality of blocks), selects only an undecodable block out of a data packet that has been received, and transmit a request for a retransmission of the undecodable block (the CRC Check of Figure 4A is applied to all packets and only packets that exceed error correction capabilities, i.e. undecodable, are selected as needing to be retransmitted); and another communications apparatus which transmits a

data packet composed of a plurality of blocks and when having received a request for a retransmission of an undecodable block, adds the block, a retransmission of which has been requested, to a block constituting a data packet to be transmitted next or subsequently, thereby increasing a number of blocks in the data packet for transmission (col. 9, lines 44-51 and Figure 3C in Rathonyi teaches adding a packet block 3, a retransmission of which has been requested, to a packet block 9 constituting a data packet to be transmitted next or subsequently from the transmitting end, thereby increasing a number of blocks to two in the data packet transmission frame for transmission); a data packet receiving end transmits, to a data packet transmitting end, a request for a retransmission of only an undecodable block out of a data packet that has been received (Figure 3C in Rathonyi teaches that a NAK, i.e., an error correction state of each error correction packet block, is transmitted from a receiving end to a transmitting end whenever an error is detected); and the data packet transmitting end, in response to the request for a retransmission, retransmits a corresponding block (In Figure 3C in Rathonyi, packet blocks 3, 6, 8 and 11 are retransmitted).

35 U.S.C. 102(e) rejection of claim 51.

Rathonyi teaches a communications system, including: a communications apparatus which receives a data packet composed of a plurality of blocks (the sixth packet transmission frame in Figure 3C of Rathonyi is a data packet transmission frame composed of a plurality of blocks), selects only an undecodable block out of a data packet that has been received, and transmit a request for a retransmission of the

undecodable block (the CRC Check of Figure 4A is applied to all packets and only packets that exceed error correction capabilities, i.e. undecodable, are selected as needing to be retransmitted); and another communications apparatus which transmits a data packet composed of a plurality of blocks and when having received a request for a retransmission of an undecodable block, adds the block, a retransmission of which has been requested, to a block constituting a data packet to be transmitted next or subsequently, thereby increasing a number of blocks in the data packet for transmission (col. 9, lines 44-51 and Figure 3C in Rathonyi teaches adding a packet block 3, a retransmission of which has been requested, to a packet block 9 constituting a data packet to be transmitted next or subsequently from the transmitting end, thereby increasing a number of blocks to two in the data packet transmission frame for transmission); a data packet receiving end transmits, to a data packet transmitting end, a request for a retransmission of only an undecodable block out of a data packet that has been received (Figure 3C in Rathonyi teaches that a NAK, i.e., an error correction state of each error correction packet block, is transmitted from a receiving end to a transmitting end whenever an error is detected); and the data packet transmitting end, in response to the request for a retransmission, retransmits a corresponding block (In Figure 3C in Rathonyi, packet blocks 3, 6, 8 and 11 are retransmitted).

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (703) 308-7066. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph D. Torres, PhD
Art Unit 2133